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1. An optical storage medium comprising:
a recordable medium; and
a groove in the recordable medium, the groove having a constant angular velocity wobble, wherein wobble cycles of the groove form a plurality of concentric zones and wherein wobble cycles in the same zone are spatially coherent.

2. The medium of claim 1, wherein the wobble of the groove is BPSK-*no transfer*
modulated for providing address information.

4. The medium of claim 1, wherein the wobble cycles in the same zone subtend the same angle; and wherein the wobble cycles in different zones subtend different angles.

5. The medium of claim 4, wherein average spatial period of a wobble cycle in a zone is an integer multiple of channel bit length.

6. The medium of claim 5, wherein maximum deviation of the wobble spatial period in each zone is the same fixed percentage.

7. The medium of claim 4, wherein wobble cycle period is stepped from zone-to-zone.

8. The medium of claim 1, wherein the groove has the same number of wobble cycles as a groove having CLV wobble.

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10. The medium of claim 1, wherein wobble cycles in the same zone are completely out-of-phase,

11. An optical storage medium comprising:
a recordable medium; and
a groove in the recordable medium, the groove having a plurality of wobble cycles that form a plurality of concentric zones, wobble cycles in the same zone
5 subtending the same angle, wobble cycles in different zones subtending different angles.

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12. The medium of claim 11, wherein the wobble of the groove is BPSK-modulated for providing address information.

13. The medium of claim 11, wherein average spatial period of the wobble cycles in the zones are integer multiples of channel bit length.

14. The medium of claim 11, wherein maximum deviation of wobble spatial period in each zone is the same fixed percentage.

15. The medium of claim 11, wherein wobble cycle period is stepped from zone-to-zone.

16. The medium of claim 11, wherein the groove has the same number of wobble cycles as a groove having CLV wobble.

17. The medium of claim 11, wherein the wobble cycles in the same zone are spatially coherent.

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18. The medium of claim 11, wherein the wobble cycles in the same zone are completely out-of-phase.

19. An optical disk comprising:
a recordable medium; and
a groove in the recordable medium, the groove having a plurality of wobble cycles that form a plurality of concentric zones, wobble cycles in the same zone
5 subtending the same angle, wobble cycles in different zones subtending different angles, the wobble cycles being BPSK-modulated.

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20. The disk of claim 19, wherein the groove has the same number of wobble cycles as a CLV wobble groove.

21. The medium of claim 1, wherein wobble cycles on at least two adjacent tracks are spatially coherent. ✓

22. The medium of claim 7, wherein each zone includes a plurality of tracks.

23. The medium of claim 1, wherein the optical storage medium is a DVD disk.

24. The medium of claim 11, wherein wobble cycles on at least two adjacent tracks are spatially coherent.

25. The medium of claim 15, wherein each zone includes a plurality of tracks.

26. The disk of claim 19, wherein the disk is a DVD disk.